

Seq ID no: 77 PXI XXT

# 10066151 Results

## SEQ ID NO: 5

### RESULT 8

US-08-396-479B-4  
; Sequence 4, Application US/08396479B  
; Patent No. 5612455  
; GENERAL INFORMATION:  
; APPLICANT: HOEY, Timothy  
; TITLE OF INVENTION: NUCLEAR FACTORS AND BINDING ASSAY  
; NUMBER OF SEQUENCES: 18  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT  
; STREET: 4 Embarcadero Center, Suite 3400  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/396,479B  
; FILING DATE:  
; CLASSIFICATION: 435  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Osman, Richard A  
; REGISTRATION NUMBER: 36,627  
; REFERENCE/DOCKET NUMBER: A-59450-1/RAO  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 494-8700  
; TELEFAX: (415) 494-8771  
; TELEX: 210 277299  
; INFORMATION FOR SEQ ID NO: 4:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 716 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
US-08-396-479B-4

Query Match 100.0%; Score 30; DB 1; Length 716;  
Best Local Similarity 100.0%; Pred. No. 62;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PRIEIT 6  
|||||  
Db 118 PRIEIT 123

### RESULT 9

US-08-818-823-4  
; Sequence 4, Application US/08818823  
; Patent No. 5708158  
; GENERAL INFORMATION:  
; APPLICANT: HOEY, Timothy  
; TITLE OF INVENTION: NUCLEAR FACTORS AND BINDING ASSAY  
; NUMBER OF SEQUENCES: 18  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT  
; STREET: 4 Embarcadero Center, Suite 3400  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: USA  
; ZIP: 94111  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk

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; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/818,823
; FILING DATE: 14-MAR-1997
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/396,479
; FILING DATE: 02-MAR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Osman, Richard A
; REGISTRATION NUMBER: 36,627
; REFERENCE/DOCKET NUMBER: A-59450-1/RAO
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 494-8700
; TELEFAX: (415) 494-8771
; TELEX: 210 277299
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 716 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-818-823-4

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Query Match          100.0%; Score 30; DB 1; Length 716;
Best Local Similarity 100.0%; Pred. No. 62;
Matches      6; Conservative      0; Mismatches      0; Indels      0; Gaps      0;

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Qy      1 PRIET 6
        |||||
Db      118 PRIET 123

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# RESULT 10

US-09-037-190-38

```

; Sequence 38, Application US/09037190
; Patent No. 6096515
; GENERAL INFORMATION:
; APPLICANT: Crabtree, Gerald R.
; APPLICANT: No. 6096515throp, Jeffrey P.
; APPLICANT: Ho, Steffan M.
; TITLE OF INVENTION: NF-AT POLYPEPTIDES AND POLYNUCLEOTIDES
; NUMBER OF SEQUENCES: 52
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: FOLEY, HOAG & ELIOT LLP
; STREET: One Post Office Square
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02109-2170
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/037,190
; FILING DATE: 09-MAR-1998
; CLASSIFICATION: 530
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/260,174
; FILING DATE: 13-JUN-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/124,981
; FILING DATE: 20-SEP-1993
; ATTORNEY/AGENT INFORMATION:
; NAME: Vincent, Matthew P.
; REGISTRATION NUMBER: 36,709
; REFERENCE/DOCKET NUMBER: APV-332.03

```

; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: 617-832-1000  
 ; TELEFAX: 617-832-7000  
 ; INFORMATION FOR SEQ ID NO: 38:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 716 amino acids  
 ; TYPE: amino acid  
 ; STRANDEDNESS:  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: peptide  
 US-09-037-190-38

Query Match 100.0%; Score 30; DB 3; Length 716;  
 Best Local Similarity 100.0%; Pred. No. 62;  
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PRIET 6 |||||  
 Db 118 PRIET 123

## SEQ ID NO: 6

RESULT 8  
 AAW02250  
 ID AAW02250 standard; protein; 902 AA.  
 XX  
 AC AAW02250;  
 XX  
 DT 17-NOV-1996 (first entry)  
 XX  
 DE Human transcription factor NFAT3.  
 XX  
 KW Nuclear factor of activated T-cells; NFAT; NFAT3; transcription factor;  
 KW cytokine; gene expression; binding assay; immune system disease; therapy;  
 KW diagnosis.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT Domain 397..686  
 FT /label= Rel\_domain  
 XX  
 PN WO9626959-A1.  
 XX  
 PD 06-SEP-1996.  
 XX  
 PF 04-MAR-1996; 96WO-US003113.  
 XX  
 PR 02-MAR-1995; 95US-00396479.  
 XX  
 PA (TULA-) TULARIK INC.  
 XX  
 PI Hoey T;  
 XX  
 DR WPI; 1996-412738/41.  
 DR N-PSDB; AAT36868.  
 XX  
 PT DNA mol. encoding human nuclear factors of activated T cells - useful for  
 PT screening potential therapeutic and diagnostic agents for immune system  
 PT diseases.  
 XX  
 PS Claim 5; Page 43-47; 64pp; English.  
 XX  
 CC The amino acid sequence (AAW02250) of human nuclear factor of activated T  
 CC -cells class 3, NFAT3, was deduced from an isolated cDNA clone  
 CC (AAT36868). NFATs (see also AAW02248-49 and AAW02251-53) include  
 CC regulators of cytokine gene expression that modulate immune system  
 CC function. They have invariant rel domain peptides (see also AAW02254-55)  
 CC and share at least 50% sequence identity in their rel domains.  
 CC Recombinant NFATs, or NFAT fragments contg. at least part of the rel

CC domain, can be expressed in prokaryotic or eukaryotic host cells. They  
CC are used in high-throughput screenings to identify agents useful in the  
CC diagnosis or treatment of diseases associated with expression of a gene  
CC modulated by a transcription complex contg. NFAT(s)

XX

SQ Sequence 902 AA;

Query Match 100.0%; Score 29; DB 2; Length 902;  
Best Local Similarity 100.0%; Pred. No. 6.4e+02;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PSIRIT 6  
|||||  
Db 114 PSIRIT 119

## SEQ ID NO: 7

### RESULT 1

US-09-550-115-1  
; Sequence 1, Application US/09550115  
; Patent No. 6780597  
; GENERAL INFORMATION:  
; APPLICANT: ARAI, KEN-ICHI  
; APPLICANT: LIU, JIE  
; TITLE OF INVENTION: NF-AT DERIVED POLYPEPTIDES THAT BIND CALCINEURIN AND  
; TITLE OF INVENTION: USES THEREOF  
; FILE REFERENCE: 084335/0120  
; CURRENT APPLICATION NUMBER: US/09/550,115  
; CURRENT FILING DATE: 2000-04-12  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 1  
; LENGTH: 119  
; TYPE: PRT  
; ORGANISM: Mus musculus  
US-09-550-115-1

Query Match 100.0%; Score 31; DB 4; Length 119;  
Best Local Similarity 100.0%; Pred. No. 5.6;  
Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PSIQFT 6  
|||||  
Db 85 PSIQFT 90

### RESULT 5

#### NFC3\_MOUSE

ID NFC3\_MOUSE STANDARD; PRT; 1075 AA.  
AC P97305; Q60896;  
DT 16-OCT-2001 (Rel. 40, Created)  
DT 16-OCT-2001 (Rel. 40, Last sequence update)  
DT 05-JUL-2004 (Rel. 44, Last annotation update)  
DE Nuclear factor of activated T-cells, cytoplasmic 3 (T cell  
DE transcription factor NFAT4) (NF-ATc3) (NF-AT4) (NFATx).  
GN Name=Nfatc3; Synonyms=NFAT4;  
OS Mus musculus (Mouse).  
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
OX NCBI\_TaxID=10090;  
RN [1]  
RP SEQUENCE FROM N.A. (ISOFORM X1).  
RC TISSUE=Thymus;  
RX MEDLINE=95378239; PubMed=7650004;  
RA Ho S.N., Thomas D.J., Timmerman L.A., Li X., Francke U.,  
RA Crabtree G.R.;  
RT "NFATc3, a lymphoid-specific NFATc family member that is calcium-  
RT regulated and exhibits distinct DNA binding specificity.";  
RL J. Biol. Chem. 270:19898-19907(1995).

RN [2]  
 RP SEQUENCE OF 12-1075 FROM N.A. (ISOFORMS X1; X2 AND DELTA-X).  
 RC TISSUE=Thymic lymphoma;  
 RX MEDLINE=97170074; PubMed=9017603;  
 RA Liu J., Koyano-Nakagawa N., Amasaki Y., Saito-Ohara F., Ikeuchi T.,  
 RA Imai S.-I., Takano T., Arai N., Yokota T., Arai K.-I.;  
 RT "Calcineurin-dependent nuclear translocation of a murine transcription  
 RT factor NFATx: molecular cloning and functional characterization.";  
 RL Mol. Biol. Cell 8:157-170(1997).  
 RN [3]  
 RP REVIEW.  
 RX MEDLINE=99189746; PubMed=10089876;  
 RA Crabtree G.R.;  
 RT "Generic signals and specific outcomes: signaling through Ca2+,  
 RT calcineurin, and NF-AT.";  
 RL Cell 96:611-614(1999).  
 CC -!- FUNCTION: Plays a role in the inducible expression of cytokine  
 CC genes in T cells, especially in the induction of the IL-2 (By  
 CC similarity).  
 CC -!- SUBUNIT: Member of the multicomponent NFATC transcription complex  
 CC that consists of at least two components, a pre-existing  
 CC cytoplasmic component NFATC2 and an inducible nuclear component  
 CC NFATC1. Other members such as NFATC4, NFATC3 or members of the  
 CC activating protein-1 family, MAF, GATA4 and Cbp/p300 can also bind  
 CC the complex. NFATC proteins bind to DNA as monomers.  
 CC -!- SUBCELLULAR LOCATION: Cytoplasmic for the phosphorylated form and  
 CC nuclear after activation that is controlled by calcineurin-  
 CC mediated dephosphorylation. Rapid nuclear exit of NFATC is thought  
 CC to be one mechanism by which cells distinguish between sustained  
 CC and transient calcium signals. The subcellular localization of  
 CC NFATC play a key role in the gene transcription.  
 CC -!- ALTERNATIVE PRODUCTS:  
 CC Event=Alternative splicing; Named isoforms=3;  
 CC Name=X1;  
 CC IsoId=P97305-1; Sequence=Displayed;  
 CC Name=X2;  
 CC IsoId=P97305-2; Sequence=VSP\_005604;  
 CC Name=Delta-X;  
 CC IsoId=P97305-3; Sequence=VSP\_005603;  
 CC -!- TISSUE SPECIFICITY: Expressed in thymus. Weakly expressed in  
 CC muscle, spleen and kidney. Also expressed in lymph node.  
 CC -!- DOMAIN: Rel Similarity Domain (RSD) allows DNA-binding and  
 CC cooperative interactions with AP1 factors (By similarity).  
 CC -!- PTM: Phosphorylated by NFATC-kinase; dephosphorylated by  
 CC calcineurin (By similarity).  
 CC -!- SIMILARITY: Belongs to the Rel/Dorsal family.  
 CC -----  
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration  
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -  
 CC the European Bioinformatics Institute. There are no restrictions on its  
 CC use by non-profit institutions as long as its content is in no way  
 CC modified and this statement is not removed. Usage by and for commercial  
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>  
 CC or send an email to [license@isb-sib.ch](mailto:license@isb-sib.ch)).  
 CC -----  
 DR EMBL; D85612; BAA12833.1; -.  
 DR EMBL; U28807; AAA93249.1; -.  
 DR HSP; O95644; 1A66.  
 DR TRANSFAC; T01949; -.  
 DR MGD; MGI:103296; Nfatc3.

Query Match 100.0%; Score 31; DB 1; Length 1075;  
 Best Local Similarity 100.0%; Pred. No. 1.8e+02;  
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PSIQFT 6  
 |||||  
 Db 109 PSIQFT 114

# SEQ ID NO: 71

## RESULT 8

AAW10130

ID AAW10130 standard; protein; 519 AA.

XX

AC AAW10130;

XX

DT 25-SEP-1997 (first entry)

XX

DE C-CAM1 (cell adhesion molecule).

XX

KW C-CAM; cell adhesion molecule; tumour suppressor; detection; treatment;  
cancer; prostate; breast; bladder; antisense; inhibit; immortal.

XX

OS Homo sapiens.

XX

PN WO9700954-A1.

XX

PD 09-JAN-1997.

XX

PF 21-JUN-1996; 96WO-US010696.

XX

PR 23-JUN-1995; 95US-00494622.

XX

PA (TEXA ) UNIV TEXAS SYSTEM.

XX

PI Hsieh J, Lin S;

XX

DR WPI; 1997-087381/08.

DR N-PSDB; AAT58786.

XX

PT Expression constructs for C-CAM cell adhesion molecule - used for  
PT expressing the C-CAM as a tumour suppressor for treating cancers or for  
PT producing immortalised cells.

XX

PS Example 1; Page 110-112; 142pp; English.

XX

CC This sequence is C-CAM1 (a cell adhesion molecule). The C-CAM1 cDNA can  
CC be used in expression constructs under the control of a promoter  
CC functional in eukaryotic cells. C-CAM can act as a tumour suppressor, and  
CC the expression constructs can be used for restoring C-CAM function in a  
CC cell that lacks C-CAM. The constructs can also be used for the detection  
CC and treatment of cancers, eg. prostate, breast or bladder cancer. The  
CC expression constructs with the nucleic acid in an antisense orientation  
CC can be used for inhibiting C-CAM function in a cell. They can be used for  
CC immortalising such cells

XX

SQ Sequence 519 AA;

Query Match 100.0%; Score 29; DB 2; Length 519;

Best Local Similarity 100.0%; Pred. No. 4.6e+02;

Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PSIQIT 6

|||||

Db 325 PSIQIT 330

## RESULT 10

AAW02251

ID AAW02251 standard; protein; 708 AA.

XX

AC AAW02251;

XX

DT 18-NOV-1996 (first entry)

XX

DE Human transcription factor NFAT4a.

XX

KW Nuclear factor of activated T-cells; NFAT; NFAT4a; transcription factor;

KW cytokine; gene expression; binding assay; immune system disease; therapy;  
 KW diagnosis.  
 XX  
 OS Homo sapiens.  
 XX  
 FH Key Location/Qualifiers  
 FT Protein 1. .699  
 FT /note= "N-terminal sequence shared by NFAT4a, NFAT4b and  
 FT NFAT4c"  
 FT Domain 411. .702  
 FT /label= Rel\_domain  
 XX  
 PN WO9626959-A1.  
 XX  
 PD 06-SEP-1996.  
 XX  
 PF 04-MAR-1996; 96WO-US003113.  
 XX  
 PR 02-MAR-1995; 95US-00396479.  
 XX  
 PA (TULA-) TULARIK INC.  
 XX  
 PI Hoey T;  
 XX  
 DR WPI; 1996-412738/41.  
 DR N-PSDB; AAT33677.  
 XX  
 PT DNA mol. encoding human nuclear factors of activated T cells - useful for  
 PT screening potential therapeutic and diagnostic agents for immune system  
 PT diseases.  
 XX  
 PS Claim 6; Page 52-54; 64pp; English.  
 XX  
 CC 4 Types of human nuclear factor of activated T-cells class 4, NFAT4a  
 CC (AAW02251), NFAT4b and NFAT4c, result from alternative splicing  
 CC downstream of the rel homology domain. The 3 types have identical N-  
 CC terminal sequences, but C-terminal sequences differ for NFATb (AAW02252)  
 CC and NFATc (AAW02253) from that for NFATa. NFATs (see also AAW02248-50)  
 CC include regulators of cytokine gene expression that modulate immune  
 CC system function. Recombinant NFATs, or NFAT fragments contg. the rel  
 CC domain, can be expressed in prokaryotic or eukaryotic host cells. They  
 CC are used in high- throughput screenings to identify agents useful in the  
 CC diagnosis or treatment of diseases associated with expression of a gene  
 CC modulated by a transcription complex contg. NFAT(s)  
 XX  
 SQ Sequence 708 AA;

Query Match 100.0%; Score 29; DB 2; Length 708;  
 Best Local Similarity 100.0%; Pred. No. 6.5e+02;  
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 PSIQIT 6  
 |||||  
 Db 109 PSIQIT 114